1855MNRAS..16R..25.

ROYAL ASTRONOMICAL SOCIETY.

Vol. XVI. *December* 14, 1855. No. 2.

M. J. Johnson, Esq. President, in the Chair.

J. G. Barclay, Esq., 54 Lombard Street, and
William Monk, Esq., St. John's College, Cambridge,
were balloted for and duly elected Fellows of the Society.

Vol. XV. of the *Monthly Notices* has been recently published. Its price is fixed by the Council at 2*s.* 6*d.* to Fellows of the Society, and 5*s.* to the public. It need hardly be mentioned that this Journal offers a ready channel of publication to observers of all classes, and to every individual who devotes his attention more or less to astronomical pursuits.

Note on the Occultation of Stars by Saturn.

By the Astronomer Royal.

"In No. 920 of the *Astronomische Nachrichten* (1854, October 10) M. Winnecke pointed out the probability of the occultation of two stars, in the years 1854 and 1856 respectively, by *Saturn.*

"The first was the probable occultation of Lalande 9362, Bessel's Zone 343, on 1854, November 13, visible in Europe. Unfavourable weather prevented the observation of this phenomenon at Greenwich; I know not whether it was looked for in any other observatory.

"The second probable occultation is that of Lalande 13545, Bessel's Zone 279, on 1856, September 9, at about $8^{h}\ 20^{m}$ Berlin mean time. This occultation will not be visible in Europe. The positions of the Sun and *Saturn* at that time are nearly as follow:—

	h m		° ′
Sun's R.A ..	11 13	N.P.D. ..	84 57
Saturn's R.A.	6 53	N.P.D. ..	67 46

"The Sun is then west of the meridian of Greenwich by $7^{h}\ 29^{m}$, and *Saturn* is west of the same meridian by $11^{h}\ 49^{m}$.

"A great circle, drawn through the centre of the Sea of Okhotsk and passing a short distance east of the eastern coasts of Australia, defines the line on which the sun is rising. A great circle, passing a little to the west of Calcutta and a little to the west of the west-

© Royal Astronomical Society • Provided by the NASA Astrophysics Data System

ern coasts of Australia, defines the line on which *Saturn* is rising. Between these two great circles the phenomenon may be seen.

"The limits which I have indicated do not include Bombay or Madras. But they include Calcutta and every British settlement east of Calcutta; especially Singapore, the coasts of China, and the whole of Australia.

"Perhaps the circulation of this notice, in the monthly publication of the Society, may induce some persons to watch for a phenomenon which at any time would be highly worthy of attention; but which, in reference to discussions now pending, might be one of very great interest.

"1855, *Dec.* 10."

Observations of the Zodiacal Light at Highfield House Observatory, near Nottingham. By E. J. Lowe, F.R.A.S.

"The following are observations which I had intended forwarding to the Society some months ago; they form the continuation of several reports upon this subject, which I have before had the honour to communicate. The chief interesting feature is *an inner* line of *brighter light* seen on the 25th of February, 1854. It has struck me that this line may be the edge of a ring, and in this case the zodiacal light will be *a ring of light* surrounding the sun, so inclined as to be in the same (or nearly) plane with the zodiac. I am aware that several eminent astronomers have seen weighty reasons why this should not be the case, and I therefore refrain from entering further into the subject at the present moment, and shall content myself with giving merely the observations themselves.

Epoch 1854, February 26^{d} 7^{h} 30^{m} G.M.T.

became very brilliant by impulses. ♉ 28°, altitude 45°, considerably brighter than the galaxy. Last night there was a brisk breeze, to-night calm. The phenomenon was faint at 7 o'clock; was still brilliant at 8 o'clock, the pulsations being strongly marked, and less bright at 8^{h} 15^{m}.

Epoch 1854, February 18^{d} 7^{h} 30^{m}

visible for a few minutes, the axis passed midway between *α Arietis* and the *Pleiades*.

Epoch 1854, February 25^{d} 7^{h} 30^{m}

scarcely perceptible.

Epoch 1854, February 25^{d} 7^{h} 33^{m}

very brilliant.

Epoch 1854, February 25^{d} 7^{h} 35^{m}

faint.

© Royal Astronomical Society • Provided by the NASA Astrophysics Data System